



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

on

Raju Singha

in recognition of the research work on

Development of Transition Metal Catalyzed and/or Metal Free Annulation Strategies: Application towards the Synthesis of Naphthalene, Pyridazine, Indene, Pyridine, Pyrimidine and Benzochromene Derivatives

Given under the seal of the Institute at Kharagpur on the Thirtieth day of July, Two Thousand and Sixteen


Registrar




Director